REMARKS

Favorable reconsideration of the above-identified application is respectfully requested in view of the following remarks.

Claims 1 and 9-17 remain canceled. Thus, Claims 2-8 are pending in this application, with Claim 2 being the only independent claim.

The Official Action rejects Claims 2-8 under 35 U.S.C. § 102(b) as being anticipated by EP 0 825 080, hereinafter *Ono*.

Ono discloses an anti-lock braking system. As in the previous Official Action, *Ono's* embodiment relating to the operational flowchart shown in Fig. 42 is relied on by the Examiner as a basis for the anticipatory rejection. As described on page 44, lines 2-3 of *Ono*, the "ABS control is effected by exciting the braking force to be applied to the front wheel on the road having a low friction coefficient μ (i.e., a low-μ road) (step 408)." "The front wheel on the road surface having a low friction coefficient μ is excited in a very small amount by ABS control, and the braking force acting on the front wheel on the road surface having the high friction coefficient μ is controlled so as to <u>follow</u> the braking force acting on the front wheel on the road surface having a low friction coefficient μ (step 410)" (page 44, lines 12-15) (emphasis added). *Ono* describes further that "[t]he braking-force servo means 313 of the front right wheel performs feed-back control so that the difference between the braking force acting on the left front wheel and the braking-force instruction received from the front right wheel becomes zero" (page 44, lines 20-22), and that "even when the vehicle travels on the split road which affords differing coefficients of friction μ at the left-side and right-side road portions, the braking forces acting on the front

wheels agree with each other, enabling prevention of vehicle instability" (page 44, lines 25-27).

In other words, *Ono* discloses that the braking force of the front wheel on the high μ side of the road is controlled to be the same as (i.e., to follow) the braking force of the front wheel on the low μ side of the road. That is, *Ono* discloses controlling the braking force of the wheel which is the object of control, i.e., the wheel, on the basis of: (1) the surface μ slope of the wheel and (2) the braking force of the reference wheel.

In contrast to *Ono*, Claim 2 is directed toward a braking force distribution control device. A wheel speed detecting means detects wheel speeds of respective wheels of a vehicle. A road surface μ slope estimating means estimates for the respective wheels, on the basis of the detected wheel speeds, slopes of a coefficient of friction μ between the wheels and a road surface as road surface μ slopes. Control means distribute braking forces to the respective wheels by controlling the braking force of each wheel, on the basis of the road surface μ slope estimated for the respective wheels by the road surface μ slope estimating means. On the basis of the detected wheel speeds, the road surface μ slope estimating means estimates slopes of braking forces with respect to wheel slip speeds as the road surface μ slopes for the respective wheels, and the control means controls a braking torque of a wheel which is an object of control on the basis of the road surface μ slope of the wheel which is an object of control and the road surface μ slope of a reference wheel among the road surface μ slopes estimated by the road surface μ slope estimating means.

Merely to assist the Examiner in fully understanding the claimed invention and not to limit the same, an exemplary way to look at the subject matter described in Claim 2 is to imagine that the surface μ slope of the reference wheel is K*, and that when the surface μ slope of the wheel which is the object of control (not the reference wheel) is less than K*, the degree of the wheel-grip is almost at its maximum and the breaking torque of the wheel which is the object of control is decreased. On the other hand, when the surface μ slope of the wheel which is the object of control is more than K*, the degree of the wheel-grip has a margin from the maximum and the braking torque of the wheel which is the object of control is increased.

The differences between *Ono* and the subject matter of Claim 2 can be more fully explained with reference to Sketches 1 and 2 attached herewith. Sketch 1 relates to *Ono's* device and shows friction characteristics of a wheel which is the object of control on one side on a high-μ road and a reference wheel on the other side on a low-μ road. In sketch 1, the braking force of the wheel which is the object of control is controlled on the basis of the surface μ slope of the reference wheel (point A). In *Ono*, feedback control is performed so as to control the braking force of the wheel which is the object of control (point B) to correspond to the braking force of the reference wheel (point A). Accordingly, the braking forces of the wheel which is the object of control on the high-μ road and the reference wheel on the low-μ road are equal, and yaw moment of the vehicle is prevented since there is no difference between braking forces of the wheels. Thus, the motion of the vehicle is stabilized.

In contrast, sketch 2 relates to the device of Claim 2 and illustrates the situation where the reference wheel is on the low-μ road surface. The braking force

of the reference wheel is controlled on the basis of the surface μ slope of the reference wheel (point A). The wheel which is the object of control is on the high-μ road surface. The braking force of the wheel which is the object of control is controlled on the basis of the surface μ slope of the reference wheel. Accordingly, the braking force of the wheel which is the object of control increases so that the surface μ slopes of the wheel which is the object of control and the reference wheel become equal (K=K*, point C).

Thus, the device defined by Claim 2 controls the braking force of the wheel which is the object of control on the basis of the road surface μ slope of the wheel which is the object of control and the road surface μ slope of the reference wheel among the road surface μ slopes estimated by the road surface μ slope estimating means. In contrast, *Ono* controls the braking force of the reference wheel on the basis of the road surface μ slope of the reference wheel, and controls the braking force of the wheel which is the object of control on the basis of the braking force of the reference wheel.

For at least the reasons stated above, Claim 2 is not anticipated by *Ono* and is therefore allowable. Claims 3-8 are allowable at least by virtue of their dependence from allowable independent Claim 2, and also because they define features that further distinguish over the cited disclosure.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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